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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,471	12/30/2003	Richard J. Melker	10457-042	3992

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BEUSSE BROWNLEE WOLTER MORA & MAIRE
390 N. ORANGE AVENUE
SUITE 2500
ORLANDO, FL 32801

EXAMINER

KREMER, MATTHEW J

ART UNIT PAPER NUMBER

3736

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/749,471	Applicant(s) MELKER ET AL.	
	Examiner Matthew J Kremer	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8, 10-11, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,335,659 to Pologe. Pologe teaches a housing 107 (Fig. 5 of Pologe), two extensions 105 and 106 (Fig. 5 of Pologe), two light generating components in light source 113 (column 3, lines 54-62 of Pologe), a light detector 114 (column 3, lines 62-66 of Pologe), and conductors 104 (Fig. 5 of Pologe). In regard to claims 8 and 17, a cannula is disclosed with air passages 115 and 116. (Fig. 5 of Pologe).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2-5 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,335,659 to Pologe as applied to claims 1 and 11. Pologe teaches that the dimensions and configurations of the extensions are such that they place the light source and detector in position on either side of the patient's nasal septum. (column 4, lines 3-18 of Pologe). Pologe further teaches that the extensions should be implemented in a shape that substantially conforms to the contours of the patient's nasal septum to minimize irritation. (column 4, lines 3-18 of Pologe). Thus, Pologe provides a clear suggestion that the dimensions and configurations of the extensions can be modified and that the determination of the most appropriate dimensions and configurations by routine experimentation would, therefore, be prima facie obvious to one having ordinary skill in the art.

5. Claims 7, 9, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,335,659 to Pologe as applied to claims 1, 8, and 11, and further in view of U.S. Patent 5,335,656 to Bowe et al. (Bowe). Pologe teaches the use of a nasal cannula to supply oxygen. (column 4, lines 41-55 of Pologe). Bowe teaches that the measurements of end tidal carbon dioxide improves diagnostic methods for determining bodily conditions. (column 1, lines 37-49 of Bowe). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the end tidal carbon dioxide sensor of Bowe in the invention of Pologe since diagnostic methods for determining bodily conditions are improved.

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6. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,335,659 to Pologe as applied to claims 1 and 11, and further in view of U.S. Patent 5,005,571 to Dietz. Pologe teaches the use of a nasal cannula to supply oxygen. (column 4, lines 41-55 of Pologe). Dietz teaches a mask, which makes it possible for the nasal cannula to function when the mask user's upper nasal passageways are blocked. (column 2, lines 44-47 of Dietz). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the mask of Dietz in the invention of Pologe since the mask makes it possible for the nasal cannula to function when the mask user's upper nasal passageways are blocked.

7. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,335,659 to Pologe as applied to claim 11, and further in view of U.S. Patent 6,679,265 to Strickland et al. (Strickland). Pologe teaches the use of a flexible material for the extensions (column 4, lines 21-23 of Strickland) but does not teach a particular material. Strickland teaches that silicon rubber or urethane is a suitable material (column 2, lines 41-43 of Strickland), which would fulfill the requirement of providing a flexible material as set forth in Pologe. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use silicon rubber or urethane for the extensions as disclosed by Strickland since Pologe requires a flexible material and Strickland teaches one such material. As to the shape and configuration of the extensions and sensor, Pologe teaches that the extensions

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should be implemented in a shape that substantially conforms to the contours of the patient's nasal septum to minimize irritation. (column 4, lines 3-18 of Pologe). Thus, Pologe provides a clear suggestion that dimensions and configurations of extensions and sensors can be modified and that the determination of the most appropriate dimensions and configurations by routine experimentation would, therefore, be prima facie obvious to one having ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Kremer whose telephone number is 571-272-4727. The examiner can normally be reached on Mon. through Fri. between 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Matthew Kremer
Assistant Examiner
Art Unit 3736



ERIC F. WINAKUR
PRIMARY EXAMINER